

IN THE CLAIMS

Please amend the claims as follows:

1. - 39. (Canceled)

40. (Previously Presented) A system for making a conductive circuit on a substantially non-conductive substrate, the system comprising:

an indenter adapted to form a plurality of indentations on a major surface of the substrate;

a plater adapted to plate conductive material on the major surface of the substrate and within the indentations formed in the major surface of the substrate; and

a grinder adapted to remove a portion of the conductive material plated on the major surface of the substrate to leave conductive material within the indentations in the major surface of the substrate.

41. (Previously Presented) The system according to claim 40 wherein the grinder is adapted to remove a portion of the conductive material between the plurality of indentations.

42. (Previously Presented) The system according to claim 40 wherein the grinder is adapted to remove a portion of the conductive material within the plurality of indentations.

43. (Previously Presented) The system according to claim 40 wherein the grinder is adapted to remove a portion of the conductive material within the plurality of indentations and the conductive material over the non-conductive material between the indentations to form a planar surface including non-conductive material and conductive material.

44. (Previously Presented) The system of claim 40 wherein the indenter is adapted to form indentations which form an opening in the sheet.

45. (Previously Presented) The system of claim 40 wherein the indenter is adapted to form indentations which form an opening passing through the sheet.

46. (Previously Presented) The system of claim 40 wherein the indenter is adapted to plastically deform a the sheet.

47. (Previously Presented) The system of claim 40 wherein the sheet is formed of non-conductive plastic.

48. (Previously Presented) The system of claim 40 wherein in the indenter further comprises:
a first roller apparatus adapted to form a plurality of indentations in the substrate; and
a second roller apparatus adapted to form a plurality of indentations in the substrate.

49. (New) The system of claim 40 wherein the conductive material within at least some of the plurality of indentations is separated from the conductive material within some of the other indentations by non-insulative material.

50. (New) The system according to claim 49 wherein the grinder removes a portion of the conductive material within the plurality of indentations.

51. (New) The system according to claim 49 wherein the grinder removes a portion of the conductive material within the plurality of indentations and the conductive material over the non-conductive material between the indentations to form a planar surface including non-conductive material and conductive material.

52. (New) The system according to claim 49 wherein the indenter includes a plate having a negative of the indentations in the substrate.

53. (New) The system of claim 49 wherein the indentations include at least one channel.

RESPONSE TO RESTRICTION REQUIREMENT

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54. (New) The system of claim 49 wherein the indentations include at least one pad.
55. (New) The system of claim 49 wherein the indentations include at least one via.
56. (New) The system of claim 49 wherein the indenter is a roller.
57. (New) The system of claim 56 wherein the roller includes an interchangeable plate having a negative of the indentations in the substrate.
58. (New) The system of claim 49 wherein the indenter includes a plurality of planar surfaces.
59. (New) The system of claim 49 wherein the grinder further comprises a plurality of grinding elements.
60. (New) The system of claim 49 wherein the indenter further comprises a plurality of indenting devices.
61. (New) The system of claim 49 wherein the indenter is adapted to form indentations which form an opening in the sheet.
62. (New) The system of claim 49 wherein the indenter is adapted to form indentations which form an opening passing through the sheet.
63. (New) The system of claim 49 wherein the indenter is adapted to plastically deform a the sheet.
64. (New) The system of claim 49 wherein the sheet is formed of non-conductive plastic.

65. (New) The system of claim 49 further comprising a base, the base producing a force that counteracts the indenter.

66. (New) The system of claim 49 further comprising:
a first load roller; and
a second load roller, wherein the first load roller and the second load roller are adapted to place a load on the major surface of the sheet and on another surface of the sheet.

67. (New) The system according to claim 49 wherein the grinder removes a portion of the conductive material between the plurality of indentations.